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Attorney Docket # 5367-69

Patent

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Volker HARLE et al.

Serial No.: 10/780,317

Filed: February 17, 2004

For: METHOD FOR FABRICATING A
PLURALITY OF SEMICONDUCTOR
BODIES, AND ELECTRONIC
SEMICONDUCTOR BODY

Examiner:
Group Art:

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on

June 30, 2004

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Thomas Langer

Name of applicant, assignee or Registered Representative

Thomas Langer

Signature

June 30, 2004

Date of Signature

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

S I R:

In compliance with the duty of disclosure under 37 C.F.R. § 1.56 and in accordance with the practice under 37 C.F.R. §§ 1.97 and 1.98, the Examiner's attention is directed to the documents listed on the enclosed form PTO/SB/08A. Copies of the listed documents are also enclosed.

WO 01/39282, WO 98/31055, EP 1 017 113, USP 5,831,277 , USP 5,684,309 and Y.H. Song et al., "Lateral Epitaxial Overgrowth of GaN and 1st Crystallographic Tilt Depending on the Growth Condition", Phys. Stat. Sol.(a) 180, (2000), pgs. 247-250 have been discussed on page 2 of the specification.

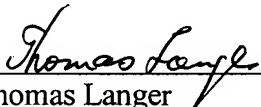
USP 6, 172,382, also submitted herewith, corresponds to WO 98/31055.

It is respectfully requested that the above information be considered by the Examiner and that the copy of the enclosed Form PTO/SB/08a be returned indicating that such information has been considered.

In accordance with 37 C.F.R §§1.97(g) and (h), the filing of this Information Disclosure Statement should not be construed as a representation that a search has been made or that information cited is, or is considered to be, material to patentability as defined in §1.56(b), or that any cited document listed or attached is (or constitutes) prior art. Unless otherwise indicated, the date of publication indicated for an item is taken from the face of the item and Applicant(s) reserve(s) the right to prove that the date of publication is in fact different.

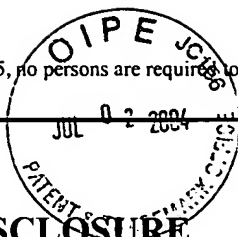
If any fees or charges are deemed required at this time in connection with the application, the same may be charged to our Patent and Trademark Office Deposit Account No. 03-2412.

Respectfully submitted,
COHEN, PONTANI, LIEBERMAN & PAVANE

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Dated: June 30, 2004

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Substitute for Form 1449/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Complete if Known

Application Number	10/780,317
Filing Date	February 17, 2004
First Named Inventor	Volker HARLE
Art Unit	
Examiner Name	
Attorney Docket Number	5367-69

Sheet 1 of 2

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind-Code ² (if known)			
		US-5,831,277	11-03-1998	Razeghi	
		US-5,684,309	11-04-1997	McIntosh et al.	
		US-6,172,381 B1	01-09-2001	Nagahama et al.	
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FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ Number ⁴ Kind-Code ⁵ (if known)				
		WO 98/31055	07-16-1998	Nagahama et a.		
		WO 01/39282	05-31-2001	Harle et al.		Abstract
		EP 1 017 133	07-05-2000	Hattori et al.		
		EP 1 263 031 A1	04-12-2002	Koike et al		

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This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)		Complete if Known	
		Application Number	10/780,317
		Filing Date	February 17, 2004
		First Named Inventor	Volker HARLE
		Art Unit	
		Examiner Name	
Sheet 2 of 2	Attorney Docket Number	5367-69	

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	1.	Y.H. Song et al.: "Lateral Epitaxial Overgrowth of GaN and Its Crystallographic Tilt Depending on the Growth Condition", Phys. Stat. Sol. (a) 180, (2000), pp. 247-250	
	2.	S. Tanaka et al.: "Anti-Surfactant in III Nitride Epitaxy-Quantum Dot Formation and Dislocation Termination", Jpn. J. Appl. Phys. Vol. 39, pp. L831-L834 Part 2, No. 8Bd., 15 Aug. 2000	
	3.	Visconti et al.: "Dislocation density in GaN determined by photoelectrochemical and hot-wet Etching", Applied Physics Letters 77, No. 22, pp. 3532-3534, 27 Nov. 2000	
	4.	E. Feltin et al.: "Epitaxial Lateral Overgrowth of GaN on Silicon (111)", Phys. Stat. Sol. (a) 188, No. 2, pp. 733-737 (2001).	
	5.	T. Gehrke et al.: "Pendeo-Epitaxy of Gallium Nitride and Aluminum Nitride Films and Heterostructures on Silicon Carbide Substrate", MRS Internet J. Semicond. Res. 4S1, G3.2 (1999).	
	6.	P.R. Hagemann, et al.: "Improvement of the Optical and Structural Properties of MOCVD Grown GaN on Sapphire by an in-situ SiN Treatment", Phys. Stat. Sol. (a) 188, No. 2, (2001), pp. 659-662.	
	7.	X. Li et al.: "GaN Epitaxial Lateral Overgrowth and Optical Characterization", Applied Physics Letters (1998), Vol. 73, No. 9, pp. 1179-1181, 31 Aug. 1998.	
	8.	B. Beaumont et al.: "Epitaxial Lateral Overgrowth of GaN", Phys. Stat. Sol. (b) 227 (2001), No. 1, pp. 1-43	
	9.	T.S. Zheleva et al.: "Pendeo-Epitaxy - A New Approach for Lateral Growth of Gallium Nitride Structures", MRS Internet J. Nitride Semicond. Res. 4S1, G3.38 (1999)	
	10.	T. Wang et al.: "A new method for a great reduction of dislocation density in a GaN layer grown on a sapphire substrate", Journal of Crystal Growth 213 (2000), pp. 188-192.	
	11.	H. Watanabe et al.: "Crystallographic Structure of FIELO-GaN Films Studied by Scanning Reflection Electron Microscopy", Workshop on Nitride Semiconductors, IPAP Conf., Serial 1, pages 272-275	
	12.	K. J. Linthicum et al.: "Process Routes for Low Defect-Density GaN on Various Substrates Employing PENDEO-Epitaxial Growth Techniques", MRS Internet J. Nitride Semicond. Res. 4S1, G4.9 (1999)	
Examiner Signature	Date Considered		

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. * Applicant's unique citation designation number (optional). * See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. * Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). * For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. * Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. * Applicant is to place a check mark here if English language Translation is attached.

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